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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,867	03/23/2001	Fredrik Sundqvist	VCC0083-US	6067

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EXAMINER

KIM, CHONG HWA

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/816,867

Applicant(s)

SUNDQVIST ET AL.

Examiner

Chong H. Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7 and 11-16 is/are rejected.
- 7) ☐ Claim(s) 4-6 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The Examiner acknowledges the Applicant's Amendment filed Feb 27, 2003 in response to the Office action made on Nov 27, 2002 and cancellation of claims 8-10.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 13 recites that the rotational movement is in the first stage for removing slack from the brake wire. However, claim 7 recites that the rotation movement is in the second stage for exerting a force on the brake wire. The above-mentioned subject matter is not fully described in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Walters, U.S. Patent 4,854,187.

Walters shows, in Figs. 1-4, an arrangement for use in connection with a parking brake for a vehicle, the arrangement comprising;

a lever 40 coupled to at least one force transmitting wire 26 in a brake system, the lever being arranged so that upon application, the arrangement operates in two steps to achieve the intended brake power; in a first step, the lever is arranged to make a translational movement A, B for taking up wire slack in the brake system and in a second step, the lever is arranged to rotate C, whereby force transmission to the wire takes place at a higher ratio than during the first step;

a force sensing mechanism 38, 46, 48, 52 coupled to the wire, the force sensing mechanism having a locking pawl 38 that is arranged to be released to allow rotation first when the slack in the wire is taken up, and when the force in the wire exceeds a chosen value;

a translation lock 16 arranged to retain the lever in the lever's translational position;

a ratchet 10 arranged to retain the lever in the lever's tightened rotational position;

a release arrangement configured to release the translation lock and the ratchet, the release arrangement including a release button 46 attached to the lever, the release button operating via a link system 48, 52 in the lever on the locks to free the translation lock and the ratchet; and

the release apparatus being designed to first release the ratchet and thereafter, when the lever is in or near the lever's rest position, then release the translation lock.

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5. Claims 1, 7, 11, 12, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki, U.S. Patent 4,793,206.

Suzuki shows, in Figs. 1-10, an arrangement for a two-stage parking brake, the arrangement comprising;

a lever mechanism 15 and 33 connected to a brake wire 34, the lever mechanism configured to perform a first stage of operation (as described in column 3, lines 47-50 and shown in Fig. 2) in which slack is removed from the brake wire by the translational movement of the lever mechanism 15 upon activation of the parking brake and a second stage (Figs. 3 and 8) in which a braking force is exerted on the brake wire by the rotation movement of the lever mechanism 33 upon activation of the parking brake;

wherein the arrangement includes a pin-in-slot configuration 20, 22 utilized for performing the translational movement in the first stage for removing slack from the brake wire;

wherein the arrangement is configured to apply no force multiplication during the performance of the translational movement in the first stage for removing slack from the brake wire;

a force sensing mechanism 30 configured to sense the amount of force being imposed on the brake wire and transition operation of the arrangement between translational and rotational movement dependent thereupon; and

a spring 36 incorporated in the force sensing mechanism and a degree of compression of the spring controlling the transition between translational and rotational movement.

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6. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki, U.S. Patent 4,793,206.

Suzuki shows, in Figs. 10 and 11, a parking brake for a vehicle comprising;
a housing holder 15 configured with at least one guide slot 42;
a lever 10, 14 having a rotation axle (at the mid-portion of the lever 14), wherein the lever is slidably and rotationally coupled to the guide slot, and wherein the lever is coupled to at least one force transmitting wire 9 in a brake system, the lever being arranged so that upon application, the parking brake operates in two steps to achieve a final intended brake power, in a first step, the lever and rotation axle are arranged to make a translational movement (Fig. 2) relative to the housing holder for taking up wire slack in the brake system, and in a second step, the lever is arranged to rotate about the rotation axle (Fig. 3), whereby force transmission to the wire takes place at a higher ratio than during the first step so as to achieve the final intended brake power.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki.

Suzuki shows, as discussed above in the rejection of claim 7 and particularly in Fig. 10, the arrangement for a two-stage parking brake comprising a key-in-slot configuration 10, 42

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utilized for performing the translational movement in the first stage for removing slack from the brake wire, but fails to show a pin-in-slot configuration.

It would have been obvious to modify the key-in-slot configuration with a pin-in-slot configuration in Suzuki since the Examiner takes Official Notice of the equivalence of such engaging configurations for their use in the relative movement in mechanical arrangement and the selection of any of these known configurations to perform the relative movement in Suzuki would be within the level of ordinary skill in the art.

Allowable Subject Matter

9. Claims 4-6 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. In response to the applicant's argument that Walter fails to show "each and every element" of the claimed invention, specifically wherein the first step being initiated "upon application of the lever", it is noted that claim 1 never recites such limitation involving the first step being initiated "upon application of the lever". Actually, claim 1 recites, in lines 3-4, "a lever coupled to at least one force transmitting wire in a brake system, said lever being arranged so that upon application,". Claim 1 never recites specifically that the lever is being actuated thereupon before the first and the second steps are initiated. And such limitation is not required under the 35 USC 102 rejection for claims 1-3.

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11. Applicant's arguments with respect to claims 7-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (703) 305-0922. The examiner can normally be reached on Monday - Friday; 9:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on (703) 308-3668. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

chk
April 21, 2003


CHONG H. KIM
PRIMARY EXAMINER